



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,905	07/11/2003	Eckhard H. Kuesters	239274US20DIV	2522

22850	7590	08/22/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314		

EXAMINER	
WILLIAMS, ROSS A	

ART UNIT	PAPER NUMBER
3714	

NOTIFICATION DATE	DELIVERY MODE
08/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/616,905	Applicant(s) KUESTERS, ECKHARD H.	
	Examiner Ross A. Williams	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-8, 10-12, 14-16, 18-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 10-12, 14-16, 18-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims 1 and 12 have been amended.

Claims 3 and 13 have been cancelled.

Claims 1, 2, 4-8, 10-12, 14-16, 18-20 and 22 are currently pending.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 5, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki (US 5,447,314) in view Englmeier (US 5,423,549).

Art Unit: 3714

Claims 1, 2, 5, 12, 22: Yamazaki discloses a golf ball locating system that locates a golf ball after it is struck by a golf club. Yamazaki discloses an ordinary golf ball (Yamazaki 2:22 – 26). Yamazaki does not specifically state that the golf ball has a dimpled surface outer surface. However the Examiner is taking OFFICIAL NOTICE that it is notoriously well known in the art for commonly used golf balls to have a dimpled outer surface. A dimpled outer surface on a golf ball is well known to improve ball flight characteristics while the ball is traveling through the air. Yamazaki discloses that the golf contains a power source, a transmitter, a shock actuated switch (i.e. piezoelectric ultrasonic transducer) (Yamazaki 2:27 – 31). Yamazaki further discloses that the transmitter transmits an ultrasonic signal upon the ball being hit (Yamazaki 2:33 – 42). Yamazaki discloses the use of at least two timers that can be used to turn the sound generating system of the golf ball on, for a certain amount of time after the golf ball is hit or after actuation of the piezoelectric transducer, as well as a timer that is used to turn off the sound generating transducer after a certain amount of time after the golf ball is hit. Yamazaki specifically states, *"In another embodiment, the on-off switch can be controlled by a miniaturized automatic timing system. After the ball is hit, the timing system can be designed to turn on (or off) the sound generating system after a certain time interval. The miniaturized timing system could be similar to the one disclosed in U.S. Pat. No. 4,843,263 entitled "Clock Timing Controller For A Plurality Of LSI Chips" (Yamazaki 4:1 – 8).*

However, Yamazaki does not disclose that upon actuation of the piezoelectric transducer, an electromagnetic signal is transmitted by a transmitter. Rather, Yamazaki

Art Unit: 3714

discloses the transmitting of a audible sound wave that is received by either a ultrasonic receiver or that is detectable by the human ear. Englmeier discloses a method of locating a golf ball containing a power source and associated electronic circuitry for transmitting an electromagnetic signal to a receiver wherein the receiver assists a player in locating their golf ball that may be lost (Englmeier 5:52 – 68). Englmeier discloses a transmitter and antenna (Englmeier 5:61 – 62).

It would be obvious to one of ordinary skill in the art to modify Yamazaki in view of Englmeier to provide a method of locating a golf ball by means of transmitting an electromagnetic signal that is received by a location receiver. This would allow a player to attempt to locate a golf ball that has been hit in the event that the player is hard of hearing or is too far from the hit ball to hear the audible sound emitted by the ball.

Claims 6-8 and 14-16: Englmeier discloses the transmitter emits frequencies to detect the golf ball and has the ability to detect different balls based on the signal associated with the ball. Englmeier also discloses a modulator capable of using a coded charge signal (for example pulse code modulation) in order to modulate the signal with player ID information in order for the user to be able to detect their ball (column 5, lines 25-50).

It would be obvious to one of ordinary skill in the art to modify Yamazaki in view or Englmeier to provide a golf ball location system that transmits modulated electromagnetic signals that are encoded with player identification information. This would allow a plurality of users to identify their individual balls amongst many other balls that are being played or are positioned on the game field.

Claims 4, 10, 11 and 18 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki (US 5,447,314) in view Englmeier (US 5,423,549) as applied above and in further view of Maleyko (US 5,228,686).

Claims 4, 10, 11 and 18 – 20: Yamazaki fails to disclose the use of a transmitter that further comprises at least one light emitting diode, nor does Yamazaki disclose an outer cover that is at least partially transparent to the electromagnetic signal, wherein the electromagnetic signal is transmitted through the at least partially transparent cover. However Englmeier discloses a golf ball possessing an outer cover that is at least partially transparent to the electromagnetic signals, meaning that the electromagnetic signals are sent from the golf ball transmitter through the outer cover (Englmeier Fig 3). Maleyko discloses the use of LED's in a ball that also possesses a transparent cover; wherein the light emitted from the LED's is able to shine through the transparent cover.

It would be obvious to one of ordinary skill in the art to modify Yamazaki in view of Englmeier and in further view of Maleyko to provide a golf ball with a cover that is at least partially transparent to an electromagnetic signal and a transmitter that comprises of at least one light emitting diode for transmitting light from the golf ball. This would enable the golf ball to be more efficiently tracked and located in low light settings.

Art Unit: 3714

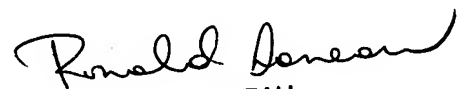
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross A. Williams whose telephone number is (571) 272-5911. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


RAW
8/14/07


RONALD LANEAU
PRIMARY EXAMINER

8/16/07